

Spix and Martius were the first explorers to bring to European museums any considerable number of specimens from the Amazon region and the northeastern States of Brazil; in southeastern Brazil they were preceded by Prince Wied, and Spix's names for many supposed new species were forestalled by those of other authors. Spix also designated many other species by new names which had been previously described, through his inattention to the literature of the subject.

In his introductory remarks Hellmayr directs attention to the fact that the plates (hand-colored) in Spix's work differ greatly in the coloring in different copies — a fault sadly not limited to the Spix bird plates!

The Spix-Martius expedition specimens of birds were mounted, according to the custom of that time, and thus have suffered for some seventy years from the fading influence of light, while some have become moth-eaten; the original labels have in many cases been lost, but fortunately the specimens proved in most such cases to be identifiable by the catalogue records. The Spix specimens have now, except in the case of some of the larger species, been unmounted, carefully labeled, and merged with the skin collection of the Munich Museum. It is to be regretted that Spix failed to record, either in his 'Avium Species Novæ' or on his labels, the exact locality where his specimens were taken, the records, in many cases simply giving 'Brasilia' as the place of capture.

The revision of the Spix material, our author states, occupied him the greater part of two years, and in its identification he did not limit himself to the resources of the Munich Museum but made direct comparison with the necessary specimens in various other European museums, especially with those in the rich collection of Count Berlepsch, to whom he makes acknowledgment for valued assistance in his work. Thus the 'Revision' has been made with exceptional care. Although entitled a 'Revision of Spix's Types of Brazilian Birds,' it is much more than this, as it includes not only the actual types of Spix's new species, but all of the known extant specimens of birds of the Spix-Martius Expedition; and not only this, it includes incidentally the revision of many obscure groups of South American birds, and much critical comment on questions of nomenclature and synonymy, which must prove of advantage to future workers in the same field. Incidentally, also, quite a number of species and subspecies are characterized as new or receive new names. The memoir closes with a valuable concordance, showing the proper modern equivalents of all of the birds included in Spix's work, as interpreted by Dr. Hellmayr.—
J. A. A.

Thayer and Bangs on Sonoran Birds.— This is mainly a nominal list¹ of the breeding birds of the Sierra de Antonez, in north central Sonora — a region previously little known. The principal localities are Opodepe, at

¹ Breeding Birds of the Sierra de Antonez, North Central Sonora. By John E. Thayer and Outram Bangs. Proc. Biol. Soc. of Washington, Vol. XIX, pp. 17–22, Feb. 26, 1906.

2000 feet altitude, and La Chumata mine, at 4500 feet altitude. The list (67 species) is based on a collection made by Mr. W. W. Brown, Jr., mainly during the month of May, 1905, and hence at the height of the breeding season. Many nests and eggs were taken. A new subspecies is *Psaltriparus plumbeus cecaumenorum*, and there are technical notes on a few other species.— J. A. A.

Lönnerberg on the Birds of South Georgia.—The present memoir¹ is based on collections made on the island of South Georgia by Mr. Erik Sörling for the Swedish Natural History Museum in Stockholm. Sörling, accompanying Captain C. A. Larsen on a whaling voyage to the antarctic seas, was able to spend the period from the middle of November, 1904, to the end of September, 1905, on South Georgia. He had thus nearly a full year on the island and secured important collections and valuable observations, especially on the seals, whales, birds, and fishes. The first important report on the birds of South Georgia was based on the material obtained by the German Antarctic Expedition of 1882–1883, papers on which were published by Pagenstecker and von den Steinen, respectively in 1885 and 1890, by whom 22 species were recognized as occurring on the island, and 19 as breeding. The Swedish Antarctic Expedition of 1902 added, as recorded by Lönnerberg, one more to the total number, and also one to the list of breeding birds; Sörling added still another, making 21 known to breed, and raising the total number thus far recorded, including occasional stragglers, to 29. In the present memoir all are treated at greater or less length; of 25 species Sörling obtained specimens, often in series, representing both young and adult, and frequently including skeletons as well as skins. Sörling's field notes, given in abstract or at length, are of special interest, while the author has made his report on the birds a summary of the present knowledge of the ornithology of South Georgia. There is a colored plate of a chick of *Chionis*, color sketches from life of the head and bill of *Nettion georgeium* and of *Phalacrocorax atriceps*, and reproductions of photographs of the King Penguin, Great Skua, and a rookery of *Pygocelis papua*. The only land bird recorded is the Antarctic Pipit (*Anthus antarcticus*).— J. A. A.

Harvie-Brown's 'A Fauna of the Tay Basin.'²—This is the tenth volume of 'The Vertebrate Fauna of Scotland' series, edited, and in part written by J. A. Harvie-Brown and the late Thomas E. Buckley. Following

¹ Contributions to the Fauna of South Georgia. I. Taxonomic and Biological Notes on Vertebrates. By Einar Lönnerberg. Sv. Vet. Akademiens Handlingar, Bd. XL, No. 5, 1906, pp. 1–102, pll. i–xii, and 7 text figures. Birds, pp. 50–90, pll. i, ii, colored, pl. xii, half-tone.

² A Fauna of the Tay Basin & Strathmore. By J. A. Harvie-Brown. Edinburgh, David Douglas, 1906—Small 4to, pp. i–lxxxvi + 1–377, 21 photogravure plates, 8 text cuts, and 6 maps. Price 30 shillings.